CLAIMS

What is claimed is:

1. An apparatus for interacting with a target software product having user interface functionality, comprising:

script execution logic configured to execute a script that involves interaction with the user interface functionality of the target software product; and

manipulation tool logic that provides functionality for use by the script application logic in interfacing with the target software product,

wherein the manipulation tool logic includes search logic configured to search for a user interface object using a plurality of different selectable search strategies.

2. An apparatus according to claim 1, wherein the manipulation tool logic is configured to interface with the target software product using a window-type interface and an accessibility interface.

3. An apparatus according to claim 1, wherein one of the search strategies is an SQL-type query string search strategy that involves comparing a specified string with information associated with the user interface object.

4. An apparatus according to claim 1, wherein one of the search strategies is a flag-based attribute search strategy that involves comparing a specified property value and qualifying flag information with information associated with the user interface object.

5. An apparatus according to claim 1, wherein:

one of the search strategies is an SQL-type query string search strategy that involves comparing a specified string with information associated with the user interface object; and

another of the search strategies is a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with the user interface object.

6. An apparatus according to claim 1, wherein the manipulation tool logic further comprises event handling logic configured to block the execution of the script execution logic until a specified event has occurred within a specified timeout period.

7. An apparatus according to claim 6, wherein the event pertains to a firing of a specified user interface object.

8. An apparatus according to claim 1, wherein the manipulation tool logic further comprises event handling logic configured to execute a callback function upon the occurrence of a specified event, the callback function executing a prescribed function upon the occurrence of the specified event.

9. A computer-readable medium having computer-readable instructions for executing each of the logic recited in claim 1.

10. An apparatus for interacting with a target software product having user interface functionality, comprising:

script execution logic configured to execute a script that involves interaction with the user interface functionality of the target software product; and

manipulation tool logic that provides functionality for use by the script application logic in interacting with the target software product,

wherein the manipulation tool logic further comprises event handling logic configured to block the execution of the script execution logic until a specified event has occurred within a specified timeout period.

11. An apparatus according to claim 10, wherein the event pertains to a firing of a specified user interface object.

12. An apparatus according to claim 10, wherein the event handling logic is further configured to execute a callback function upon the occurrence of a specified event, the callback function executing a prescribed function upon the occurrence of the specified event.

13. An apparatus according to claim 10, wherein the manipulation tool logic is configured to interface with the target software product using a window-type interface and an accessibility interface.

14. An apparatus according to claim 10, wherein the manipulation tool logic includes search logic configured to perform an SQL-type query string search strategy that involves comparing a specified string with information associated with a user interface object.

15. An apparatus according to claim 10, wherein the manipulation tool logic includes search logic configured to perform a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with a user interface object.

16. An apparatus according to claim 1, wherein the manipulation tool logic includes search logic configured to search for a user interface object using a plurality of different selectable search strategies:

wherein one of strategies is an SQL-type query string search strategy that involves comparing a specified string with information associated with the user interface object; and

another of the search strategies is a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with the user interface object.

17. A computer-readable medium having computer-readable instructions for executing each of the logic recited in claim 10.

18. An apparatus for interacting with a target software product having user interface functionality, comprising:

script execution logic configured to execute a script that involves interaction with the user interface functionality of the target software product; and

manipulation tool logic that provides functionality for use by the script application logic in interacting with the target software product,

wherein the manipulation tool logic further comprises event handling logic configured to execute a callback function upon the occurrence of a specified event, the callback function executing a prescribed function upon the occurrence of the specified event.

19. A computer-readable medium having computer-readable instructions for executing each of the logic recited in claim 18.

20. A method for interacting with a target software product having user interface functionality, comprising:

executing a script that involves interaction with the user interface functionality of the target software product; and

interfacing with a manipulation tool library to carry out at least one function specified in the script, wherein the at least one function includes:

searching for a user interface object using a selectable one of a plurality of different search strategies provided by the manipulation tool library.

21. A method according to claim 20, wherein the interfacing comprises interfacing with the target software product using a window-type interface and an accessibility interface.

22. A method according to claim 20, wherein one of the selectable search strategies is an SQL-type query string search strategy that involves comparing a specified string with information associated with the user interface object.

23. A method according to claim 20, wherein one of the selectable search strategies is a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with the user interface object.

24. A method according to claim 20, wherein:

one of the search strategies is an SQL-type query string search strategy that involves comparing a specified string with information associated with the user interface object; and

another of the search strategies is a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with the user interface object.

25. A method according to claim 20, wherein another function of the manipulation tool library comprises event handling for blocking the execution of the script until a specified event has occurred within a specified timeout period.

26. A method according claim 25, wherein the event pertains to a firing of a specified user interface object.

27. A method according to claim 20, wherein another function of the manipulation tool library comprises event handling for executing a callback function upon the occurrence of a specified event, the callback function executing a prescribed function upon the occurrence of the specified event.

28. A computer-readable medium having computer-readable instructions for executing the method of claim 20.

29. A method for interacting with a target software product having user interface functionality, comprising:

executing a script that involves interaction with the user interface functionality of the target software product; and

interfacing with a manipulation tool library to carry out at least one function specified in the script, wherein the at least one function includes:

event handling for blocking the execution of the script until a specified event has occurred within a specified timeout period.

30. A method according to claim 29, wherein the event pertains to a firing of a specified user interface object.

31. A method according to claim 29, wherein the event handling further comprises executing a callback function upon the occurrence of a specified event, the callback function executing a prescribed function upon the occurrence of the specified event.

32. A method according to claim 29, wherein the interfacing comprises interfacing with the target software product using a window-type interface and an accessibility interface.

33. A method according to claim 29, wherein another function of the manipulation tool library comprises searching using an SQL-type query string search strategy that involves comparing a specified string with information associated with a user interface object.

34. A method according to claim 29, wherein another function of the manipulation tool library comprises searching using a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with a user interface object.

35. A method according to claim 29, wherein another function of the of the manipulation tool library comprises searching for a user interface object using a selectable one of a plurality of different search strategies:

wherein one of the strategies is an SQL-type query string search strategy that involves comparing a specified string with information associated with the user interface object; and

another of the search strategies is a flag-based attribute search strategy that involves comparing a specified attribute value and qualifying flag information with information associated with the user interface object.

36. A computer-readable medium having computer-readable instructions for executing the method recited in claim 29.

37. A method for interacting with a target software product having user interface functionality, comprising:

executing a script that involves interaction with the user interface functionality of the target software product; and

interfacing with a manipulation tool library to carry out at least one function specified in the script, wherein the at least one function includes:

event handling for executing a callback function upon the occurrence of a specified event, the callback function executing a prescribed function upon the occurrence of the specified event.

38. A computer-readable medium having computer-readable instructions for executing the method recited in claim 37.